

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match. The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

4.120.102.g NASA National Space Radiation Laboratory (NSRL)
(Peer 27) Power Up Tests

Attachment

| C-A-OPM Procedures in which this Attachment is used. | | |
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| 4.120.102 | | |
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Hand Processed Changes

| <u>HPC No.</u> | <u>Date</u> | <u>Page Nos.</u> | <u>Initials</u> |
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Approved: _____ ***Signature on File***
Collider-Accelerator Department Chairman _____
Date

V. Castillo

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title: _____ Checksum: _____

Division B Software Filename and Checksum: Title: _____ Checksum: _____

Initial testing complete:

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Test results reviewed by:

Safety Section Head's Name (Print): _____ Life Number: _____

Safety Section Head's Name (Sign): _____ Date: ____/____/____

Test results accepted by Radiation Safety Committee:

RSC Member's Name (Print): _____ Life Number: _____

RSC Member's Name (Sign): _____ Date: ____/____/____

1.1 Test Division A for Power-up conditions

| | | | |
|--------------------------|---|---|--------------------|
| | PLACE | Peer 27 in CA, Mode 16 | |
| <input type="checkbox"/> | VERIFY | Peer 27 is in CA | MODE 16 |
| | RESET | Peer 27 gates: BGE1, BGI1, BGI2 and BGE2 | |
| <input type="checkbox"/> | VERIFY | Peer 27 gates: <input type="checkbox"/> BGE1, <input type="checkbox"/> BGI1, <input type="checkbox"/> BGI2 and <input type="checkbox"/> BGE2 are | RESET |
| | FORCE | Sweep of Zone NSRL-Z1, Zone NSRL-Z2 and Zone NSRL-Z3 | |
| <input type="checkbox"/> | VERIFY | Zone NSRL-Z1 <input type="checkbox"/>, Zone NSRL-Z2 <input type="checkbox"/> and Zone NSRL-Z3 <input type="checkbox"/> | SWEPT |
| | TURN OFF | AC Power to the Peer 27 Division A PLC | |
| <input type="checkbox"/> | VERIFY | AC Power to the Peer 27 Division A PLC is | TURNED OFF |
| | WAIT | 30 Seconds | |
| | TURN ON | AC Power to the Peer 27 Division A PLC | |
| <input type="checkbox"/> | VERIFY | AC Power to the Peer 27 Division A PLC is | TURNED ON |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 27 Restricted Access light | OFF |
| | RESET | Div A Hardware Faults | |
| <input type="checkbox"/> | VERIFY | Div A Hardware Faults are | RESET |
| <input type="checkbox"/> | VERIFY | MCR sees Div A Critical Devices: Z1PCD <input type="checkbox"/>, Z2PCD <input type="checkbox"/>, Z3PCD <input type="checkbox"/>, Z1RBCD <input type="checkbox"/> and Z2RBCD <input type="checkbox"/> | SAFE |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 27 Div A gates: <input type="checkbox"/> BGE1, <input type="checkbox"/> BGI1, <input type="checkbox"/> BGI2 and <input type="checkbox"/> BGE2 are | NOT RESET |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 27 Div A Crash Systems are | NOT CRASHED |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 27 Div A: Zone NSRL-Z1, Zone NSRL-Z2 and Zone NSRL-Z3 | NOT SWEPT |
| <input type="checkbox"/> | Check for Acceptance of Test of Division A for Power-up conditions | | |

1.2 Test Division B for Power-up conditions

| | | | |
|--------------------------|---|---|--------------------|
| | PLACE | Peer 27 in CA, Mode 16 | |
| <input type="checkbox"/> | VERIFY | Peer 27 is in CA | MODE 16 |
| | RESET | Peer 27 gates: BGE1, BGI1, BGI2 and BGE2 | |
| <input type="checkbox"/> | VERIFY | Peer 27 gates: <input type="checkbox"/> BGE1, <input type="checkbox"/> BGI1, <input type="checkbox"/> BGI2 and <input type="checkbox"/> BGE2 are | RESET |
| | FORCE | Sweep of Zone NSRL-Z1, Zone NSRL-Z2 and Zone NSRL-Z3 | |
| <input type="checkbox"/> | VERIFY | Zone NSRL-Z1 <input type="checkbox"/>, Zone NSRL-Z2 <input type="checkbox"/> and Zone NSRL-Z3 <input type="checkbox"/> | SWEPT |
| | TURN OFF | AC Power to the Peer 27 Division B PLC | |
| <input type="checkbox"/> | VERIFY | AC Power to the Peer 27 Division B PLC is | TURNED OFF |
| | WAIT | 30 Seconds | |
| | TURN ON | AC Power to the Peer 27 Division B PLC | |
| <input type="checkbox"/> | VERIFY | AC Power to the Peer 27 Division B PLC is | TURNED ON |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 27 Restricted Access light | OFF |
| | RESET | Div B Hardware Faults | |
| <input type="checkbox"/> | VERIFY | Div B Hardware Faults are | RESET |
| <input type="checkbox"/> | VERIFY | MCR sees Div B Critical Devices: Z1PCD <input type="checkbox"/>, Z2PCD <input type="checkbox"/>, Z3PCD <input type="checkbox"/>, Z1RBCD <input type="checkbox"/> and Z2RBCD <input type="checkbox"/> | SAFE |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 27 Div B gates: <input type="checkbox"/> BGE1, <input type="checkbox"/> BGI1, <input type="checkbox"/> BGI2 and <input type="checkbox"/> BGE2 are | NOT RESET |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 27 Div B Crash Systems are | NOT CRASHED |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 27 Div B: Zone NSRL-Z1, Zone NSRL-Z2 and Zone NSRL-Z3 | NOT SWEPT |
| <input type="checkbox"/> | Check for Acceptance of Test of Division B for Power-up conditions | | |

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: ____/____/____

TTL: Sign for completion of final testing: _____

Date: ____/____/____